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SEP 2 4 2021

Docket Nos.: 52-025

ND-21-0577
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
ITAAC Closure Notification on Completion of ITAAC 2.3.02.02a [Index Number 285]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.02.02a [Index Number 285]. This ITAAC verifies the following for the Chemical and Control Volume System (CVS): (1) that the American Society of Mechanical Engineers (ASME) Code Section III design reports exist for the as-built components and piping identified in the Combined Operating License (COL) Appendix C, Tables 2.3.2-1 and 2.3.2-2 for CVS as ASME Code Section III, (2) a report exists and concludes that the ASME Code Section III requirements are met for nondestructive examination of pressure boundary welds, and (3) a report exists and concludes that the results of the pressure test of the components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (NEI) 08-01, *Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52*, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli A. Roberts at 706-848-6991.

Respectfully submitted,

Michael J. Yox
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Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion for ITAAC 2.3.02.02a [Index Number 285]

MJY/JRV/sfr

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Southern Nuclear Operating Company
ND-21-0577
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.3.02.02a [Index Number 285]

ITAAC Statement

Design Commitment:

2.a) The components identified in Table 2.3.2-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.

2.b) The piping identified in Table 2.3.2-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.

3.a) Pressure boundary welds in components identified in Table 2.3.2-1 as ASME Code Section III meet ASME Code Section III requirements.

3.b) Pressure boundary welds in piping identified in Table 2.3.2-2 as ASME Code Section III meet ASME Code Section III requirements.

4.a) The components identified in Table 2.3.2-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.

4.b) The piping identified in Table 2.3.2-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.

Inspections, Tests, Analyses:

Inspection will be conducted of the as-built components and piping as documented in the ASME design reports.

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

A hydrostatic test will be performed on the components and piping required by the ASME Code Section III to be hydrostatically tested.

Acceptance Criteria:

The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III.

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

ITAAC Determination Basis

This ITAAC required inspections, tests, and analyses be performed and documented to ensure the Chemical and Volume Control System (CVS) components and piping listed in the Combined License (COL) Appendix C, Table 2.3.2-1 (Attachment A) and Table 2.3.2-2 (Attachment B) that

are identified as American Society of Mechanical Engineers (ASME) Code Section III, are designed and constructed in accordance with applicable requirements.

2.a and 2.b) The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III.

Each component listed in Table 2.3.2-1 as ASME Code Section III was fabricated in accordance with the VEGP Updated Final Safety Analysis Report (UFSAR) and the ASME Code Section III requirements. The ASME Code Section III certified Design Reports, for these components exist and document that the as-built components conform to the approved design details. The ASME Section III Design Report for each component is documented in the component's completed ASME Section III Code Data Report. The individual component ASME Section III Code Data Reports are documented on the ASME Section III N-5 Code Data Report for the applicable piping system (Reference 1).

The as-built piping listed in Table 2.3.2-2 including the components listed in Table 2.3.2-1 as ASME Code Section III, were subjected to a reconciliation process (Reference 2), which verified that the as-built piping was analyzed for applicable loads (e.g. stress reports) and for compliance with all design specification and Code provisions. Design reconciliation of the as-built systems, including installed components, validated that construction completion, including field changes and any nonconforming condition dispositions, were consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as, those for the related Quality Assurance (QA) verification/inspection activities, which confirmed adequate construction in compliance with the ASME Code Section III and design provisions, are referenced in the N-5 Data Report and/or its sub-tier references.

The applicable ASME Section III N-5 Code Data Reports, which include the location of the certified Design Reports, for all the components listed in Table 2.3.2-1 (Attachment A) and piping listed in Table 2.3.2-2 (Attachment B) as ASME Code Section III, exist and conclude that these installed components were designed and constructed (including their installation within the applicable as-built piping system) in accordance with the ASME Code (1998 Edition, 2000 Addenda and 1989 Edition, 1989 Addenda), Section III requirements as applicable, as described in UFSAR Subsection 5.2.1 (Reference 3). The N-5 Code Data Reports for the piping system containing the components listed in the Table 2.3.2-1 and Table 2.3.2-2 are identified in Attachments A and B, respectively.

3.a and 3.b) A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

Inspections were performed in accordance with ASME Code Section III (1998 Edition, 2000 Addenda) to demonstrate that as-built pressure boundary welds in components identified in Table 2.3.2-1 as ASME Code Section III meet ASME Code Section III requirements (i.e., no unacceptable indications).

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the components' pressure boundary welds are documented in the Non-destructive Examination Report(s), which support completion of the respective ASME Section III N-5 Code Data Report certified by the Authorized Nuclear Inspector, as listed in Attachment A.

Per ASME Code Section III, Subarticle NCA-8300, "Code Symbol Stamps," the N-5 Code Data Report (Reference 1), documented satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in Table 2.3.2-1 as ASME Code Section III met ASME Code Section III requirements.

An inspection was performed in accordance with Reference 2 to demonstrate that the as-built pressure boundary welds in piping identified in Table 2.3.2-2 (Attachment B) as ASME Code Section III met ASME Code Section III requirements (i.e., no unacceptable indications). This portion of the ITAAC was completed when the piping identified in Table 2.3.2-2, which is encompassed within the respective piping system Code Symbol N-Stamp and the corresponding piping system Code N-5 Data Report (Reference 1), was completed. The non-destructive examinations (including visual inspection, liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the piping pressure boundary welds were documented in the Non-destructive Examination Report(s) within the piping system's supporting data package, which support completion of the respective Code Stamping and Code N-5 Data Report. The completion of stamping the respective piping system along with the corresponding ASME Code N-5 Data Reports (certified by the Authorized Nuclear Inspector) ensured that the piping was constructed in accordance with the design specifications and the ASME Code Section III and that the satisfactory completion of the non-destructive examinations of piping pressure boundary welds for the pipe lines identified in Table 2.3.2-2 met ASME Code Section III requirements and were documented in the Non-destructive Examination Report(s) within the supporting data packages.

4.a and 4.b) A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

Hydrostatic tests were performed by the vendor to demonstrate that the components identified in Table 2.3.2-1 (Attachment A) as ASME Code Section III retain their pressure boundary integrity at their design pressure. The completion of the N-5 Data Reports is governed by Reference 2.

This portion of the ITAAC was completed once each component identified in Table 2.3.2-1 had their individual Code Symbol N-Stamp and corresponding Code Data Report completed, and the components installed into the respective Code Symbol N-Stamped piping system and documented on the corresponding N-5 Code Data Report (Reference 1). The hydrostatic testing results of the component's pressure boundary were documented in the Hydrostatic Testing Report(s) within the supporting component's data package, which support completion of the respective Code Stamping and Code Data Report(s).

The completion of stamping the individual components and the respective piping system along with the corresponding ASME Code Data Reports (certified by the Authorized Nuclear Inspector) ensures that the components were constructed in accordance with the Design Specifications and the ASME Code Section III and that the satisfactory completion of the hydrostatic testing of each component identified in Table 2.3.2-1 as ASME Code Section III were documented in the Hydrostatic Testing Report(s) within the supporting data packages and met ASME Code Section III requirements.

This ITAAC also verified that the piping identified in Table 2.3.2-2 (Attachment B) fully met all applicable ASME Code, Section III requirements and retains its pressure boundary integrity at its design pressure.

Hydrostatic tests were performed in accordance with procedures identified in Reference 1 (as applicable) that comply with the ASME Code (1998 Edition, 2000 Addenda), Section III requirements to demonstrate that the ASME Code Section III piping identified in Table 2.3.2-2 retains its pressure boundary integrity at its design pressure.

The hydrostatic tests verified that there were no leaks at welds or piping, and that the pressure boundary integrity was retained at its design pressure. The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Reports for the applicable piping system (i.e., CVS) (Reference 1).

The applicable ASME Section III N-5 Code Data Report(s) (Reference 1) identified in Attachments A and B documents that the results of the hydrostatic testing of the components and piping identified in Table 2.3.2-1 and Table 2.3.2-2 respectively conform with the requirements of the Code (1998 Edition, 2000 Addenda), Section III.

Reference 1 provides the evidence that the ITAAC Acceptance Criteria requirements were met:

- The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III;

- A report exists and concludes that the ASME Code Section III requirements were met for non-destructive examination of pressure boundary welds; and

- A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.3.2-1 and 2.3.2-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

This ITAAC also verified that Preservice Inspection (PSI) for the applicable portions of the Class 1, 2, and 3 Chemical and Control Volume System (CVS) components and piping identified in Tables 2.3.2-1 and 2.3.2-2 were completed (Reference 7), in accordance with the Unit 3 PSI program plan (Reference 5), and that the results of the PSI conforms with the requirements of the ASME Boiler and Pressure Vessel (B&PV) Code.

References 1 and 4 are available for NRC inspection as part of the Unit 3 ITAAC 2.3.02.02a Completion Packages (Reference 6).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review, which included now consolidated ITAAC Indexes 286, 287, 288, 289 and 290, found no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.3.02.02a (Reference 6) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.02.02a was performed for VEGP Unit 3 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV3-CVS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Chemical and Volume Control System (CVS)"

2. APP-GW-GAP-139, Rev. 7, "Westinghouse/Stone & Webster ASME Code Data Report and As-Built Documentation Interface Procedure"

3. VEGP 3&4 Updated Final Safety Analysis Report, Rev. 10.1, Subsection 5.2.1, Compliance with Codes and Code Cases

4. SV3-CVS-S3R-001, Rev. 0, "Vogtle Unit 3 Chemical Volume and Control System (CVS) ASME Section III As-Built Piping System Design Report"

5. SV3-GW-GEI-100, Rev. 2, "AP1000 Preservice Inspection Program Plan for Vogtle Unit 3"

6. 2.3.02.02a-U3-CP-Rev0, ITAAC Completion Package

7. APE-10-00015, SNC Interoffice Memo, dated 9/21/2021, From Ken Baity to Kelli A. Roberts; "Completion of Preservice Inspection for CVS Class 1, 2, and 3 Portions of Systems"

Attachment A

SYSTEM: Chemical and Volume Control System (CVS)

Equipment Name *	Tag No. *	ASME Code Section III*	ASME III As-Built Design Report	N-5 Report
RCS Purification Motor-operated Isolation Valve	CVS-PL-V001	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
RCS Purification Motor-operated Isolation Valve	CVS-PL-V002	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
RCS Purification Motor-operated Isolation Valve	CVS-PL-V003	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Resin Flush Line Containment Isolation Valve	CVS-PL-V040	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Resin Flush Line Containment Isolation Valve	CVS-PL-V041	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Demineralizer Resin Flush Line Containment Isolation Thermal Relief Valve	CVS-PL-V042	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Letdown Containment Isolation Valve	CVS-PL-V045	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Letdown Containment Isolation Valve	CVS-PL-V047	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Letdown Line Containment Isolation Thermal Relief Valve	CVS-PL-V058	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Makeup Return Line Bypass Check Valve	CVS-PL-V067	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Purification Return Line Pressure Boundary Check Valve	CVS-PL-V080	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Purification Return Line Pressure Boundary Isolation Check Valve	CVS-PL-V081	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001

Attachment A

SYSTEM: Chemical and Volume Control System (CVS)

Equipment Name *	Tag No. *	ASME Code Section III*	ASME III As-Built Design Report	N-5 Report
CVS Purification Return Line Pressure Boundary Check Valve	CVS-PL-V082	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Auxiliary Pressurizer Spray Line Pressure Boundary Valve	CVS-PL-V084	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Auxiliary Pressurizer Spray Line Pressure Boundary Check Valve	CVS-PL-V085	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Makeup Line Containment Isolation Motor-operated Valve	CVS-PL-V090	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Makeup Line Containment Isolation Motor-operated Valve	CVS-PL-V091	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Zinc Injection Containment Isolation Valve ORC	CVS-PL-V092	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Zinc Injection Containment Isolation Valve IRC	CVS-PL-V094	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Zinc Addition Line Ctmt Isol Thermal Relief Valve	CVS-PL-V098	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Makeup Line Containment Isolation Thermal Relief Valve	CVS-PL-V100	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Demineralized Water Isolation Valve	CVS-PL-V136A	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Demineralized Water Isolation Valve	CVS-PL-V136B	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Hydrogen Injection Containment Isolation Check Valve IRC	CVS-PL-V217	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Hydrogen Injection Containment Isolation Valve ORC	CVS-PL-V219	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001

*Excerpts from COL Appendix C Table 2.3.2-1

Attachment B

SYSTEM: Chemical and Volume Control System (CVS)

Line Name*	Line Number*	ASME Code Section III*	ASME III As-Built Design Report	N-5 Report
CVS Purification Line	L001 L040	Yes Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Resin Flush Containment Penetration Line	L026+	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Purification Line Return	L038	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Pressurizer Auxiliary Spray Connection	L070+ L071+	Yes Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Letdown Containment Penetration Line	L051+	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Makeup Containment Penetration Line	L053	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Hydrogen Injection Containment Penetration Line	L213+ L214+ L217+	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Zinc Injection Containment Penetration Line	L061+	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001
CVS Return Line from Regenerative Heat Exchanger	L036	Yes	SV3-CVS-S3R-001	SV3-CVS-MUR-001

*Excerpts from COL Appendix C, Table 2.3.2-2

+ For girth fillet welds between piping and socket welded fittings, valves and flanges, refer to VEGP UFSAR Section 5.2.1.1 (Reference 3).